

Arturo Loria has intensively worked as researcher, as teacher, as organizer. His most significant scientific contributions concern: large cosmic ray showers, the development of a Geiger counter without walls working inside a cloud chamber, the construction of the first European bubble chamber (used in research in CERN), the physics of pions and of anti protons, the physics of silicon and of ice, radon in the atmosphere. As a researcher, he bore the responsibility of building and organizing the Marmolada Cosmic Ray Laboratory and the new Physics Department of the University of Modena, where he worked for the last 25 years before his retirement in 1986.

His deep interest for the teaching of physics bore most fruitful results both at the level of higher education and at the secondary school level. At the University of Modena he created and directed for 16 years the first (and for 16 years the only) Italian prototype teacher training postgraduate course in Physics Education "Corso di Perfezionamento in Fisica a Indirizzo Didattico", devoted to the education of physics teachers. His interest and active involvement in secondary school physics did not end here: he also devoted many efforts to the problem of introducing Quantum Physics in the secondary physics curriculum. For this he developed a didactical method, he designed and built a didactical apparatus which allows a good approximation in a thermal measurement of Planck's constant and he wrote various papers of epistemology and history of science. One, on "Einstein and Education", appeared in the Einstein Centenary Volume 494 7. The Conference 7.4 The IUPAP - ICPE Medal For Physics Education produced by the International Commission on Physics Education.

This wide and diverse activity brought Arturo Loria in tight interaction for collaboration and advice with many Italian and international bodies: we may mention the Ministero della Pubblica Istruzione (Italian Ministry of Education), the Museo della Scienza e della Tecnica (Science and Technology Museum in Milano, Italy), the Societa Italiana di Fisica (Italian Physical Society), the Consiglio Nazionale delle Ricerche (National Research Council), the Associazione per l'Insegnamento della Fisica (Italian Association for Physics Teaching), the International Commission on Physics Education of IUPAP, the Advisory Committee on Physics Education of the European Physical Society and the European Space Agency.

For many years he was member of the Editorial Board of the journal "Physics Education" of the Institute of Physics in London. Arturo Loria was one of GIREP's first promoters and was active in it since its foundation in Switzerland in March 1966 .

After serving as Vice-President from 1976 to 1979, in 1979 he was elected President of GIREP and served in this responsibility until 1984. During this period, in 1980 he organized the ICPE International Conference on "Education for Physics Teaching" in Trieste. Before and during his commitment in the GIREP Committee his work in favour of physics teaching in the context of GIREP's activities produced important consequences, especially in Italy. In October 1973 he organized the 4th GIREP Seminar (as the periodical meetings were then called) in Venice, on the topic "Electricity, magnetism and mechanics in the secondary school". This Seminar, considered by the Italian Ministry of Education high level in-service course to which it sent about 100 high school teachers, took place just a few years after the PSSC course had promoted, also in Italy, a move towards innovating the methods of teaching physics in schools. The Seminar reinforced and gave a more solid basis to the teachers' enthusiasm for a renewed pedagogical methodology. Thanks also to the fact that many of the attending teachers were active members of the Italian Association for Physics Teaching, the impact of the Venice Seminar was widely spread among physics teachers in Italy. This was further demonstrated by the fact that in the following years the attending teachers became the nucleus of a very strong national group of GIREP members, some of them still active participants to GIREP activities after more than 20 years. The officers of the GIREP Committee and the participants to the 1995 GIREP Conference, whose organization again in Italy after 22 years was mainly the responsibility of Marisa Michelini, one of Arturo Loria's students,

are proud to offer the GIREP medal to a man who did so much for physics education in his country and worldwide.